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10/645,025	08/21/2003	George T. Chaney	T-0101.03 (DIV)	7324

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EXAMINER

AVERY, BRIDGET D

ART UNIT	PAPER NUMBER
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3618

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

**MAILED**

**SEP 29 2005**

**GROUP 3600**

Application Number: 10/645,025  
Filing Date: August 21, 2003  
Appellant(s): CHANEY, GEORGE T.

Christopher L. Makay  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed June 28, 2005 appealing from the Office action mailed November 29, 2004.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

No evidence is relied upon by the examiner in the rejection of the claims under appeal.

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 25-27 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weaver et al. (US Patent 3,760,770) in view of Chase, Jr. (US Patent 5,760,569).

Weaver et al. teaches an electric vehicle including a chassis defining a battery module compartment, and a battery module insertable into the battery module compartment of the chassis, where the battery module completes the chassis upon insertion into the battery module compartment thereby providing the chassis with required structural integrity necessary to support the electric powered vehicle during travel. Note, Weaver teaches a recharging receptacle that allows the batteries to be charged from an appropriate recharging unit.

Weaver et al. lacks the teaching of a method of replacing a battery module and the teaching of a service facility.

Chase, Jr. teaches a method (see column 4, lines 59-60) of replacing a battery module (32, 34) of an electric powered vehicle (12) including the steps of providing a service facility (44) for electric powered vehicles; providing the service facility (44) with a plurality of battery modules (32, 34) and a system for charging and recharging (claim 26) the battery modules (32, 34), as described in column 3, lines 57-61 and column 4, lines 19-28; opening the service facility to drivers owning the electric powered vehicles (12), where a driver having an electric powered vehicle (12) with a depleted battery module (32, 34) enters the service facility (44), as clearly shown in Figure 1; removing the depleted battery module (32, 34) from the electric powered vehicle (12), as described in column 3, lines 61-66; inserting a fully charged battery module (32, 34) into

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the electric powered vehicle (12), as described in column 4, lines 7-17; and charging the driver for the fully charged battery module (32, 34), as described in column 4, lines 28-31. Further, the electric powered vehicle of Chase, Jr. includes a battery module compartment (22), the battery module (32, 34) insertable into the battery module compartment (22) of the chassis. In the step of removing the depleted battery module (32, 34) from the electric powered vehicle (12), Chase, Jr. teaches the steps of: opening an access door (26) attached to the vehicle to expose the battery module compartment (22); and sliding the depleted battery module (32, 34) from within the battery module compartment (22), as shown in Figure 2 and as described in column 3, lines 61-66. In the step of inserting a fully charged battery module (32, 34) into the electric powered vehicle (12), Chase, Jr. teaches the steps of: sliding the battery module (32, 34) including a fully charged battery (34) into the battery module compartment (22); and closing the access door (26) attached to the vehicle (12) to seal the battery module compartment (22), as described in column 3, lines 11-15 and column 4, lines 1-17.

Based on the teachings of Chase, Jr., it would have been obvious to one having ordinary skill in the art, at the time the invention was made to modify the system of Weaver et al. to include a method of replacing a battery module including the provision of a service facility to eliminate delays in operation and save time that might otherwise be lost during recharging and servicing of the batteries.

#### **(10) Response to Argument**

Contrary to applicant's remarks, the battery drawer (164), as taught by Weaver et al. US Patent 3,760,770, is a battery module insertable into a battery module compartment/opening (27) of a chassis/undercarriage structure (22). The battery module/drawer (164) completes the undercarriage structure/chassis (22) upon insertion into the battery module compartment/opening (27) providing the undercarriage structure/chassis (22) with required structural integrity necessary to support the vehicle during travel to prevent the cart from tipping over as taught in column 9, lines 37-43. Further, the battery drawer/module (164) includes end plates (172) that "assume a coplanar relationship with the sides (23, 25) of the undercarriage structure/chassis (22) when the battery drawer/module (164) is completely confined within the undercarriage structure/chassis (22). Contrary to applicant's argument that "The only function of the battery drawer 164 is to hold thereon the batteries 186 that supply power to the electric motor 30," found on page 5, lines 15-18, Weaver et al. teaches "the battery drawer/module (164) and the batteries contained therein give the feed cart 20 a very favorable center of gravity which allows the feed cart to be freely maneuvered around the livestock feeding area without significant danger of tipping over", in column 9, lines 37-43. A cart chassis that is prone to tipping over **does not** have "the structural integrity necessary to withstand normal driving conditions." In order for the cart of Weaver to have "the structural integrity necessary to withstand normal driving conditions" the battery drawer/module must be in place to prevent the cart from tipping over. For example, a conventional dresser has at least one drawer. A conventional

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dresser is "incomplete" without the drawer, even if the dresser can remain standing without the drawer.

In response to applicant's argument, found on page 7, lines 12-14, that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Bridget Avery *BA*

Conferees:

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A.S. *AS*

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